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# Biotechnology Notes

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*Biotechnology Notes*, a compilation of agency activities, news events, and upcoming meetings, is prepared for members of the U.S. Department of Agriculture's (USDA) Committee on Biotechnology in Agriculture (CBA) by USDA's Office of Agricultural Biotechnology (OAB).

## INSIDE USDA

### CALLING ALL IBC'S

If you belong to a university's Institutional Biosafety Committee (IBC) or work for a state department of agriculture and are interested in field tests of genetically modified organisms, you may want to attend a training workshop August 16-17 in Research Triangle Park, NC. It is being sponsored by the National Biological Impact Assessment Program within USDA's Cooperative State Research Service (CSRS). Topics to be covered include the principles of risk assessment, how to apply for a field test permit, locating sources of information, and records management. For more details, please call Patricia L. Traynor at 517-336-3923; Fax: 517-336-3924.

### THIRD INTERNATIONAL BIOSAFETY SYMPOSIUM PLANNED

The "Third International Symposium on the Biosafety Results of Field Tests of Genetically Modified Plants and Organisms" has been scheduled for November 13-16, 1994 in Monterey, CA. An international steering committee is developing the program, which will focus on the biosafety issues involved in field tests of genetically modified plants and microbes. For more details, call USDA's Office of Agricultural Biotechnology (OAB) at 703-235-4419; Fax: 703-235-4429.

### NEW NAL/BIC DIRECTOR

Raymond Dobert has been named the new Coordinator of the Biotechnology Information Center (BIC) at USDA's National Agricultural Library (NAL) in Beltsville, MD. Dobert has a background in plant physiology and microbial genetics, having most recently worked with Eric Triplett at the University of Wisconsin. He also served as a Congressional Science Fellow for the American Society of Plant Physiologists, working on biotechnology issues in the office of Senator Tom Daschle.

The BIC is responsible for acquiring, compiling and disseminating information on the impact of the science of biotechnology on agriculture. Over 400 computer databases are used by the BIC staff to retrieve the most current biotechnology-related material. It provides services to researchers, educators, industry, and the public. For more information call the BIC at 301-504-5340; Fax: 301-504-7098; Telnet: biotech@nalusda.gov.

## **ONE EXPERT DOES NOT A RECOMMENDATION MAKE**

Although Federal advisory committees are usually comprised of experts representing various fields of study, not all committees may have enough experts in one specialized area, such as aquatic ecology, to formulate a recommendation. In order to bring in additional experts, a committee will often break off into a specialized subcommittee or working group. Such is the case with USDA's Agricultural Biotechnology Research Advisory Committee (ABRAC).

The ABRAC has formed a working group on aquatic biotechnology and environmental safety and is inviting all experts in aquatic ecology, as well as the general public, to attend a workshop August 18-20 at the University of Minnesota in Minneapolis, MN. The purpose of the workshop is to fine tune a draft document that sets out performance standards meant to help scientists design research protocols. Anyone planning to attend the workshop will be mailed in advance a copy of the standards.

Recommendations from the Minneapolis meeting will be presented to the full ABRAC when it meets December 15-16 in Washington, DC. For more details please call Maryln Cordle at 703-235-4419.

## **NEWS AROUND THE NATION (AND THE WORLD)**

### **HERBICIDE TOLERANCE -- THE TRAIT MOST OFTEN FIELD TESTED**

In a recent survey conducted by the Organization for Economic Cooperation and Development (OECD) of field tests conducted since 1986, herbicide tolerance of crops ranked first with 483 approvals, or 57 percent of the total number of approvals (846). The second most frequently tested trait is for virus resistance.

The crop most used for field testing was found to be the oilseed rape, which was used 34 percent of the time. Trailing the oilseed rape in descending order were the potato, tobacco, tomato, corn, flax, soybean, and cotton.



The two countries that have approved the most field tests are the United States and Canada. Those countries having the fewest number of field tests were Japan (1), Norway (1), and Australia (1).

## **OECD WRAPS UP CROP PLANT DOCUMENT**

The Group of National Experts for Safety in Biotechnology of the OECD agreed to move forward and publish its long-awaited guidance for field testing genetically engineered crops. Known formally as "Scientific Considerations Pertaining to the Environmental Safety of the Scale-Up of Crop Plants Developed by Biotechnology," the document will now be made available to any country that is considering conducting field experiments.

In general, the document explains how to do a large-scale field trial using appropriate oversight controls to ensure both environmental and public health safety. It was drafted by representatives from 12 U.S. agencies and then submitted to the group of 24 OECD member nations. After several revisions, a consensus was reached in the spring of this year. The drafting committee was led by James Cook, research leader in the Root Disease and Biological Control Research Unit at USDA's Agricultural Research Service in Pullman, WA. The document should soon be available through the OECD Publications and Information Centre, 2001 L. Street, N.W., Suite 700, Washington, DC 20036-4095.

## **BRITISH VISIT USDA, REVIEW BIOTECH PROGRAMS**

Seven members representing British government, industry and academia met with USDA senior regulatory and research officials July 21 in Washington, DC. The visit was coordinated by the UK's BioIndustry Association. The visitors were briefed on regulatory activities and, in particular, the Animal and Plant Health Inspection Service's (APHIS) new notification procedure.

Other topics covered included an explanation of how the Department sets research priorities and funds projects; how USDA handles biotechnology data and information resources; and the role of federal science advisory committees.

## **UPDATE ON BGH BILLS ON THE HILL**

There are now eight BGH-related (bovine growth hormone) bills in Congress. All have been referred to their respective committees. A summary of the bills follows:

**S734 and HR1904:** "Bovine Growth Hormone Moratorium Act of 1993." This bill amends the Agricultural Act of 1949 to temporarily prohibit the sale of milk from BGH-injected

cows. The bill also calls for a study of the economic impact of BGH on the dairy industry and the federal milk price program.

**S736 and HR1905:** "Bovine Growth Hormone User Assessment Act." This bill amends the Agricultural Act of 1949 to reduce the price received for milk produced by cows injected with BGH.

**S735 and HR1906:** "Bovine Growth Hormone Milk Labeling Act." This bill amends the Federal Food, Drug and Cosmetic Act (FFDCA) to require that all milk and milk products be labeled to indicate whether or not the product is derived from cows injected with BGH.

**S954 and HR2382:** "Bovine Somatotropin Marketing Equivalency Act of 1993." A bill that prohibits the use of BGH in intrastate, interstate, or international commerce until equivalent marketing practices are established for the use of BGH in other exporting nations.

## **INTERNATIONAL MEETING PLANNED ON BIOSAFETY AND MICROBIAL ECOLOGY**

A scientific meeting on risk assessment and biotechnology will be held in Granada, Spain October 24-27. The meeting will bring together individuals who have been involved in the BRIDGE (Biotechnology Research for Innovation, Development and Growth in Europe) program, an effort by the European Commission to foster biotechnology research in Europe. This will in fact be BRIDGE's final meeting on risk assessment and its mid-term meeting on microbial ecology.

About a dozen scientists will present papers on various areas of research such as the safety of genetically engineered retroviruses, the effects of selection on gene stability and transfer on soil bacteria, a safety assessment of field tests using oilseed rape and sugar beet, and the design of fungal DNA. For more details please call Maria del Mar Fandila at +34-58-121011 or send a fax to +34-58-129600.

## **SHARING THE PRINCIPLES OF BIOSAFETY WITH AFRICAN NATIONS**

In an effort to preserve Africa's rich natural resources, the Dutch Ministries of Development Cooperation and Environment along with the Research Council of Zimbabwe are planning to conduct a four day conference on biosafety. The emphasis will be on developing risk assessment and management procedures and the acquisition of the necessary expertise to implement such procedures in the countries of southern and eastern Africa.

Participants will be invited from Angola, Botswana, Kenya, Malawi, Mozambique, Namibia, Tanzania, Uganda, Zambia, and Zimbabwe. The meeting will take place this Fall in



Harare, Zimbabwe. For more details please write to Bert Visser, Special Programme, Biotechnology and Development Cooperative, Directorate General for International Cooperation, P.O. Box 20061, 2500 EB, The Hague, The Netherlands.

## IN CASE YOU WEREN'T THERE

■ **OAB Director Alvin Young** addressed a session of about 300 people at the Annual Meeting and Food Expo of the Institute of Food Technologists in Chicago II, July 11. Young talked about food biotechnology from a global perspective. He said the world needs more and better food. About 75 million people are malnourished, and 75,000 die each day from starvation. He said biotechnology is one method that promises to increase food production without sacrificing natural resources. He also discussed the need to conduct more innovative research and develop strategies to conserve, process, and improve foods produced in developing countries. Young's presentation was one of six that made up a session entitled "Food Biotechnology Applications in Developing Countries." The session was sponsored by USDA's CSRS and Alabama A&M University. Turnout for this year's event was a record 17,000 people.

■ **"Biotechnology and Agriculture: Feeding the World's Growing Population"** was the topic of a presentation given by Richard Herrett at the July 13 meeting of the Biotechnology Industry Organization (BIO). Herrett said traditional plant breeding will not satisfy the increased demand for food brought about by a growing world population. Through biotechnology, however, especially advances being made in drought and herbicide resistance, he said biotechnology has the "potential" to address these problems. He stressed the importance of having an informed public that understands the risks as well as the benefits so it can make an informed decision at the marketplace. He also emphasized the environmental benefits through reduced pesticide and fertilizer use and greater sustainability of existing farm land.

■ **The Environmental Protection Agency's** (EPA) subcommittee on plant pesticides of the Biotechnology Science Advisory Committee (BSAC) met July 13 in response to a request from EPA. The agency asked for advice from the subcommittee on several scientific issues dealing with the regulation of plant pesticides under the FFDCA. Plant pesticides are those substances produced by plants for pesticidal purposes.

The subcommittee suggested that EPA consider a modified scheme that identifies which grouping of plant pesticides might be regulated under FFDCA. The subcommittee also discussed the merits of *in vitro* digestibility assays used to predict toxicity. For more details about the meeting, please call Bernice Slutsky, EPA Office of Pesticide Programs, at 703-305-7974.

## NEW PUBLICATIONS

- *Biotechnology and Nutrition*. Edited by D. D. Bills and Shain-dow Kung. Published by Butterworth-Heinemann, 80 Montvale Ave., Stoneham, MA 02180. 1992. Call 1-800-366-2665.
- "Biotechnology of Algae: A Bibliography." Prepared by V. Stone, R. Warmbrodt, and Ann Young at USDA's NAL. December 1992. Available through interlibrary loan in public, state, university or corporate libraries. For more information, call Ray Dobert at NAL at 301-504-5340; Fax: 301-504-7098.
- *Biotechnology Directory of Eastern Europe*. 1993. For details write to Walter de Gruyter Inc., 200 Saw Mill River Road, Hawthorne, NY. 10532, or call 914-747-0110.
- "Biotechnology, Theory and Applications." Proceedings of the Third Pacific Rim Conference held in Taipei, Taiwan. To order write to Weichen Tien, President, Development Center for Biotechnology, 1 Chang Hsing Street, Taipei, Taiwan, Republic of China.
- "Realizing Our Potential: A Strategy for Science, Engineering and Technology." Published by HMSO Publications Center, London, England. May 1993. To order call 071-873-9090; Fax: 071-873-8200.

## UPCOMING MEETINGS

- Aug. 10-11:** Fifth Annual Public Meeting on Veterinary Biological Products. Ames, Iowa. Sponsored by USDA's APHIS. The agenda includes biotechnology issues. For details call Frank Tang at 301-436-4833; Fax: 301-436-8669.
- Aug. 17-20:** Plant Biotechnology Methods. This workshop introduces the principles, techniques, and applications of plant biotechnology. Sponsored by Penn State University. University Park, PA. For more details call either 1-800-833-5533 or 814-863-3650.
- Aug. 18-20:** Workshop on Performance Standards for Research with Genetically Modified Fish and Shellfish. Minneapolis, MN. Sponsored by the Minnesota Department of Fisheries and Wildlife, the University of Minnesota, Minnesota Sea Grant, the Minnesota Legislature, and USDA. For details call USDA/OAB at 703-235-4419.
- Aug. 30-Sept. 2:** First Biomass Conference of the Americas: Energy, Environment, Agriculture, and Industry. Burlington, VT. Sponsored by USDA; the Department of



Energy; the EPA; and Energy, Mines and Resources of Canada. For details call 303-231-1158 or 1040; or send a fax to 303-231-7719.

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**Sept. 5-10:** The 9th International Biodeterioration and Biodegradation Symposium. University of Leeds, UK. For more information write to D. R. Edyvean, Department of Chemical Engineering, the University of Leeds, Leeds LS2 9JT, UK; or call 44-532-332424.

**Sept. 8-12:** Food Safety and Quality Assurance -- The Use of Antibody Methods. El Escorial, Spain. For details call +44-244-831531; Fax: +44-244-814305.

**Sept. 9-10:** Antisense Symposium. Ames, Iowa. Sponsored by The Walter E. and Helen Parke Loomis Fund, Iowa State University, Pioneer Hi-Bred International Inc., ICI Seeds, American Cyanamid, and Procter and Gamble. For more information, please call Cecil Stewart at 515-294-1063; Fax: 515-294-1337.

**Sept. 12-15:** Third International Conference on Separations for Biotechnology. Reading, UK. Call +44-71-235-3681; Fax: +44-71-823-1698.

**Sept. 13-17:** Fungal Biotechnology. Ross Priory, Loch Lomond, Scotland. Sponsored by the University of Strathclyde. For details about this course, write to Ms. E. Clements, Fermentation Centre, Department of Bioscience and Biotechnology, University of Strathclyde, 204 George St., Glasgow G1 1XW, UK.

**Sept. 13-17:** Issues in Agricultural Bioethics. University of Nottingham, Sutton Bonington Campus, UK. For details about this conference, call Ben Mephram at 06-02-516303; Fax: 06-02-51602.

**Sept. 14:** "The State of the Biotechnology Industry." Presentation to be given by Greg Simon, Domestic Policy Advisor in the Office of the Vice President. Washington, DC. Sponsored by BIO (Biotechnology Industry Organization). For reservations call 202-234-3330; Fax: 202-234-3565.

**Sept. 16-17:** Agricultural Research Institute Annual Meeting. McLean, VA. Call 301-530-7122.

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**Oct. 12:** Biotechnology Lobbying. A lecture sponsored by BIO. Call Richard Okiuye at 202-234-3330; Fax: 202-234-3565 for details.

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**Biotechnology Notes** is prepared by Marti Asner, USDA/OAB public affairs specialist. Comments are always appreciated and may be addressed to USDA/OAB, Room 1001, RPE, 14th and Independence Ave., S.W., Washington, DC 20250-2200. Telephone: 703-235-4419; Fax: 703-235-4429.

## ***FIRST ANNOUNCEMENT***



**November 13-16, 1994**

**Doubletree Hotel at Fisherman's Wharf  
Two Portola Plaza  
Monterey, California**

**For more information please call Dr. Alvin Young, USDA, Office of Agricultural  
Biotechnology at 703-235-4419; Fax 703-235-4429**